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# THE GEOGRAPHICAL REVIEW

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## DESERT SYRIA, THE LAND OF A LOST CIVILIZATION

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[With separate map, Pl. I, facing p. 108.]

Among the regions which were once populous and highly civilized, but which are now desert and deserted, there are few which were more closely connected with the beginnings of our own civilization than the desert parts of Syria and northern Arabia. It is only of recent years that the vast extent and great importance of this lost civilization has been fully recognized and that attempts have been made to reduce the extent of the unexplored area and to discover how much of the territory which has long been known as desert was formerly habitable and inhabited. The results of the explorations of the last twenty years have been most astonishing in this It has been found that practically all of the wide area lying between the coast range of the eastern Mediterranean and the Euphrates, appearing upon the maps as the Syrian Desert, an area embracing somewhat more than 20,000 square miles, was more thickly populated than any area of similar dimensions in England or in the United States is today if one excludes the immediate vicinity of the large modern cities. It has also been discovered that an enormous desert tract lying to the east of Palestine, stretching eastward and southward into the country which we know as Arabia, was also a densely populated country. How far these settled regions extended in antiquity is still unknown, but the most distant explorations in these directions have failed to reach the end of ruins and other signs of former occupation.

Various questions arise in our minds if we pause to think of this strange condition of things. When did the fertility of these lands cease and their civilization come to an end? How long had that civilization flourished? What caused its undoing? Some of these questions are well-nigh unanswerable, others may be answered with more or less definiteness, but each questions are well-nigh unanswerable.

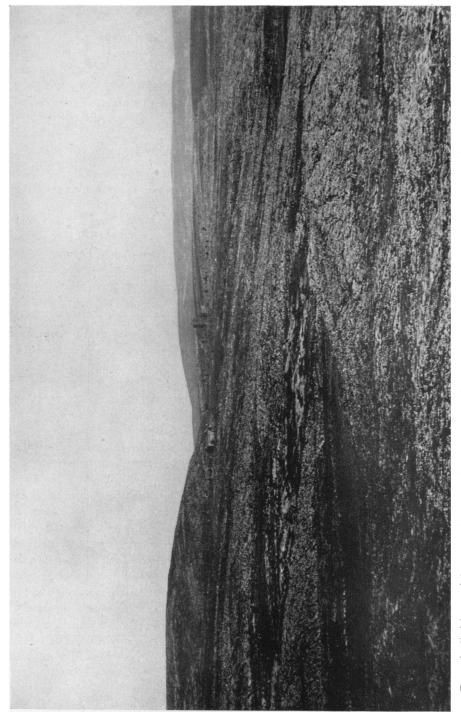


Fig. 1—Serdjibleh, one of the many ruined towns that dot the barren hills of northern Desert Syria. From a distance it is often difficult to believe that these are not inhabited places.

tion involves a number of minor problems impossible of solution. In the present article, I shall not attempt to answer the above questions in the order given or to offer solutions to the many problems involved, but shall endeavor to give a description of the country as it is today and to draw inferences as to its condition in ancient times. In the process certain questions will be answered, and various solutions of the problems will suggest themselves; other problems will be left to the reader's speculative imagination.

## THE HISTORICAL BACKGROUND

A few definitely determined facts will undoubtedly help to give an historical background to the descriptions. It is plain from the architectural remains, and from inscriptions, that these regions have not been lived in to any wide extent since the early years of the seventh century after Christ. The date 610 seems to mark the end of civilized occupation for a large part of the country; and this date coincides interestingly with the last great Persian invasion in 610-612 and the wars of conquest under the generals of the Prophet Mohammed which began less than twenty years later.

The earliest definite records found in the country itself indicate that civilization had reached a high point of development here at the beginning of the Christian era, and there is less definite evidence to be gleaned from the monuments and from the reading of history to show that this civilization had begun at least two or three hundred years earlier; but there are also remains well scattered over the region which suggest the existence of a far older civilization about which we know little, and the history of the country, gathered in fragments from the Holy Scriptures and from the written records of the ancient Egyptians and Assyrians, plainly indicates that the region was occupied by a civilized and organized society in the earliest days of man's civilized state.

The inhabitants of the entire region were of comparatively pure Semitic stock until the conquests of Alexander and his successors, in the fourth century before Christ, introduced an element of European blood through colonization. During the historical period represented by the remains still visible in the country the northern half of the region was ruled by the Greek kings, that is the Diadochi, successors of Alexander's general Seleukos, with their capital at Antioch, from the fourth to the first century before Christ. During most of this period the southern half was divided into independent, or semi-independent, kingdoms of Oriental origin, the Maccabean kingdom of the Jews, the Idumean kingdom, and the early Arabic Nabataean kingdom of the extreme south. Between the middle of the first century before Christ and the early years of the second century after Christ the country passed by slow degrees into the Roman Empire as the provinces of Syria, Arabia, Palestine, etc. With the rise of Chris-

tianity to a state religion in the fourth century the whole country passed under the control of the Eastern Empire and remained a powerful bulwark of Christian civilization until it was cut off in the early years of the seventh century. Two Aramaic dialects constituted the speech of the inhabitants, Syriac in the north and Nabataean, an early form of Arabic, in the south; but, after the conquest of Alexander, Greek was introduced and in time became the chief written, and probably the common spoken, language of the whole country during the succeeding centuries under Rome and Constantinople.

# Northern Syria

RUINS IN THE LIMESTONE HILLS EAST OF THE ORONTES

The traveler who has crossed the settled, and more or less populous, coast range of Northern Syria and descended into the narrow fertile valley of the Orontes, encounters in any farther journey toward the east an irregular range of limestone hills lying north and south and stretching to the northeast almost halfway to the Euphrates (cf. map, Pl. I). These hills are about 2,500 feet high, rising in occasional peaks from 3,000 to 3,500 feet above sea level. They are gray and unrelieved by any visible vegetation. On ascending into the hills the traveler is astonished to find at every turn remnants of the work of men's hands, paved roads, walls which divided fields, terrace walls of massive structure. Presently he comes upon a small deserted and partly ruined town composed of buildings large and small constructed of beautifully wrought blocks of limestone (Fig. 2), all rising out of the barren rock which forms the ribs of the hills. If he mounts an eminence in the vicinity, he will be still further astonished to behold similar ruins lying in all directions. He may count ten or fifteen or twenty, according to the commanding position of his lookout. a distance it is often difficult to believe that these are not inhabited places (Fig. 1); but closer inspection reveals that the gentle hand of time or the rude touch of earthquake has been laid upon every building. Some of the towns are better preserved than others; some buildings are quite perfect but for their wooden roofs which time has removed, others stand in picturesque ruins, while others still are level with the ground (Fig. 3). On a far-off hilltop stands the ruin of a pagan temple, and crowning some lofty ridge lie the ruins of a great Christian monastery (Fig. 4). after mile of this barren gray country may be traversed without encountering a single human being. Day after day may be spent in traveling from one ruined town to another without seeing any green thing save a terebinth tree or two standing among the ruins, which have sent their roots down into earth still preserved in the foundations of some ancient building. No soil is visible anywhere except in a few pockets in the rock from which it could not be washed by the torrential rains of the

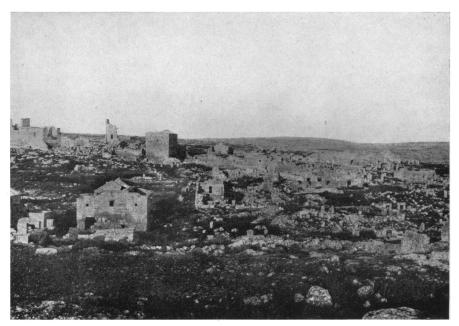


Fig. 2

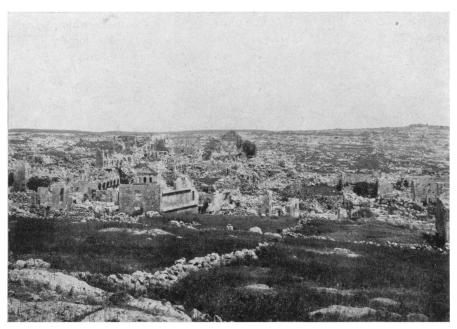


Fig. 3

Fig. 2—Serdjillā, a deserted villa town in the Djebel Rîhā of Northern Syria (for locations see map, Pl. I).

Fig. 3—Simkhar in the Djebel Sim'an, with a patch of soil held in place by ancient walls. Another ruined town in the distance on the right.

wet season; yet every ruin is surrounded with the remains of presses for the making of oil and wine. Only one oasis has been discovered in these high plateaus. This lies far to the north. It is the site of an ancient town (Fig. 5); olive trees, oaks, and terebinth grow luxuriantly between the ruined walls, and grass covers the flat spaces. A high tower rises in the center of the ruin, so thickly surrounded with trees and underbrush that it is almost impossible to approach it; and here in the midst of dense growth



Fig. 4—The monastery and great church of St. Simeon Stylites in the denuded area of the Djebel Sim'an.

is a spring which has kept the spot green during centuries. Yet it is so far in the desert that no human beings live here.

## THEIR ARCHITECTURE

The architecture of these deserted towns represents at least seven centuries of development and illustrates every variety of structure suitable to a highly developed society. Among the structures that are apparently of very early date, though they have no inscriptions upon them, are buildings in a simple form of polygonal masonry (Fig. 6) with heavy moldings at the top of the walls and massive door frames. Definitely dated buildings of the first and second centuries comprise temples of exquisite workmanship, mostly in ruins because they were preyed upon for building material during the Christian period. There are also fine houses belonging to these centuries in all parts of Syria. The Christian period is represented by churches large and small, little country chapels, public baths

which were often the gifts of wealthy citizens, other public buildings, extensive shops, or bazaars, sumptuous villas, ordinary private houses, and monumental tombs in endless variety.

The churches of the fourth century (Fig. 7) are simple structures with little ornament, but those of the fifth and sixth are more ornate than any Christian buildings before the Gothic period in Europe. Here you will find the ruins of one of the oldest churches, with a chapel of the later



FIG.5—Shekh Sleman, the only oasis in the limestone hills of Northern Syria. Its luxuriant vegetation emphasizes the aridity and barrenness which is otherwise the rule in this region. A spring has kept the spot green during centuries, yet it is so far in the desert that no human beings live there now.

period beside it, there a church which was built out of the remains of a pagan temple. The "business architecture" is simple but durable; it consists of such buildings as oil factories, shops, and inns. One finds large hotels, or inns (Fig. 8), named as such in inscriptions, at the chief halting stations on the way to places of pilgrimage and also little wayside inns along the highways. The tomb structures are very numerous and form the most notable collection of mausoleums in the world (Fig. 9).

## RUINS IN THE DESERT REGION TOWARD THE EUPHRATES BEND

Passing eastward from this range of hills, one descends into a gently rolling country that stretches miles away toward the Euphrates. At the eastern foot of the hills one finds oneself in a totally different country, at first quite fertile and dotted with frequent villages of flat-roofed houses. Here practically all the remains of ancient times have been destroyed



Fig. 6



Fig. 7

Figs. 6-9-Examples of the architecture of the deserted towns.

Fig. 6—The earliest type: buildings in a simple form of polygonal masonry.

Fig. 7—One of the oldest churches in Northern Syria, a building of the fourth century at Kharâb Shems.

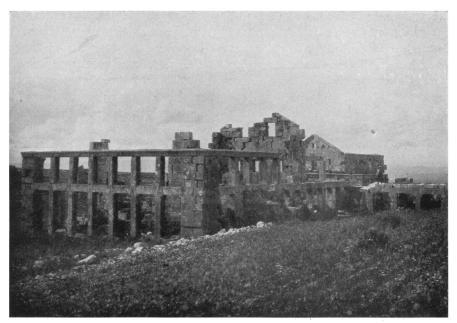


Fig. 8

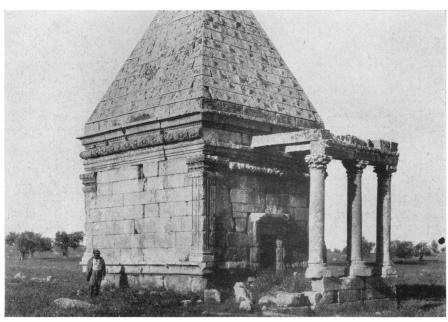


Fig. 9

Fig. 8—An inn on the road to St. Simeon's shrine, an example of "business architecture" in Northern Syria.

Fig. 9—One of the splendid tombs of Northern Syria, at Dânā; olive trees in the background.

through ages of building and rebuilding. Beyond this narrow fertile strip the soil grows drier and more barren, until presently another kind of desert is reached, an undulating waste of dead soil. Few walls or towers or arches rise to break the monotony of the unbroken landscape; but the careful explorer will find on closer examination that this region was more thickly populated in antiquity even than the hill country to the west. Every unevenness of the surface marks the site of a town, some of them



Fig. 10—Serakib on the Aleppo-Damascus road, a modern village of domed houses of mud brick (kubbeh) characteristic of central Desert Syria. This is a typically Mesopotamian form of domestic architecture, as old as the days of Nebuchadnezzar.

cities of considerable extent. One finds that much sun-dried brick was used in the construction of these ancient buildings and that the stone, which was more sparingly employed, was not limestone but black basalt. One also discovers—the ancient quarries were used as cisterns and are still visible—that the country is underlain with this type of lava. Here and there an arch will be found standing, and an occasional column still marks the ruin of some great structure. All this region, except the parts of it bordering upon the fertile strip along the western edge, is wholly deserted; few even of the wandering Bedouins traverse its dry and wasted steppes. Toward the south, however, in the region of Hama, one begins to encounter villages composed for the most part of domed houses (kubbeh) of mud brick (Fig. 10), exactly like those which compose the domestic architecture of the Euphrates country. It is interesting to note that this typically Mesopotamian form of domestic architecture, as old as the days

of Nebuchadnezzar, exists in the middle part of Syria; while all the villages and towns of Northern Syria, like Harim at the extreme northern end of the hills described above (Fig. 11), are built with flat roofs, and the modern villages of the south are of the same general type. In two or three places in this eastern desert district, baked brick and basalt were used in the erection of structures of more than usual magnificence. At Kasr Ibn Wardân (351/3° N. and 371/5° E., Pl. I) there is a group of build-



Fig. 11—Harim, a modern village at the extreme northern end of the limestone hills of northern Desert Syria with flat-roofed houses typical of the architecture of this region.

ings, comprising a beautiful church, an extensive palace, and large barracks, all composed of black basalt and yellow brick of such excellent make that one is tempted to believe that it was imported. Proceeding still farther east and still traversing the desert one comes upon ruins of ancient cities in which the ordinary houses were built of sun-dried brick, but the temples and similar large structures were built of limestone or gypsum. Such is the case at Isriyeh (35½° N. and 38° E.), one of the most distant points that has been reached in the Syrian Desert.

# Southern Syria

# THE HAURÂN AND THE LEDJA

To explore the unknown areas of Southern Syria the traveler has to cross the wider tract of inhabited territory of Palestine. Passing over Jordan and climbing the hills of Ammon or Gilead, he looks out over the ancient province of Arabia. Before him lies a wide plain which at its northern end is very fertile and dotted with villages. Beyond the plain, toward the east, rise the volcanic mountains of the Djebel Haurân (Fig. 12); to the north of them lies the lava field of the Ledjā (Fig. 13), and, far to the south, an undulating region which, though fertile at first, lapses gradually into a desert steppe. The hills on which the traveler is standing are of limestone; but the stone which crops out in the plain, and which constitutes the mass of the mountains beyond and extends



Fig. 12—A view in the Djebel Haurân, the volcanic mountains of Southern Syria, north of Kanawât. il-Mefaleh, a ruin on the hill in the distance.

southward into the steppe, is black basalt. To the northeast of 'Ammân but far out in the steppe, beside the dry bed of the Wadī il-'Akîb, is the termination of the lava flow (Fig. 14) which poured out of the craters of the Djebel Haurân and underlies the great expanse of the steppe. Beyond this point limestone takes the place of basalt. The plain which lies between the hills east of Jordan and the Djebel Haurân, called the plain of in-Nukra, or the Haurân plain, though populous, has not been well explored. Each village marks the site of an ancient town; but only the more massive of the ancient buildings have survived generations of rebuilding, and these are almost hidden in modern work. Many of the buildings are important, however, and inscriptions abound. The mountainous area of the Djebel Haurân was fairly well explored sixty years ago and is full of wonderful remains of the Nabataean, Roman, and Christian periods; but the ruins here have been inhabited by the Druses for about a century, and the ancient remains are being gradually broken up. The gloomy wastes of the lava fields of the Ledjā, until recently practically unexplored, are also dotted with ancient towns, some of them of great antiquity; but even this inhospitable land has



Fig. 13



Fig. 14

Fig. 13—Part of the vast lava field of the Ledjä, Southern Syria. Ruins of Kastal Krem on the ridge. Fig. 14—The end of the lava flow which once poured out southward from the craters of the volcanic mountains of the Djebel Hauran. The dry bed in the foreground is the Wadi il-Akib.

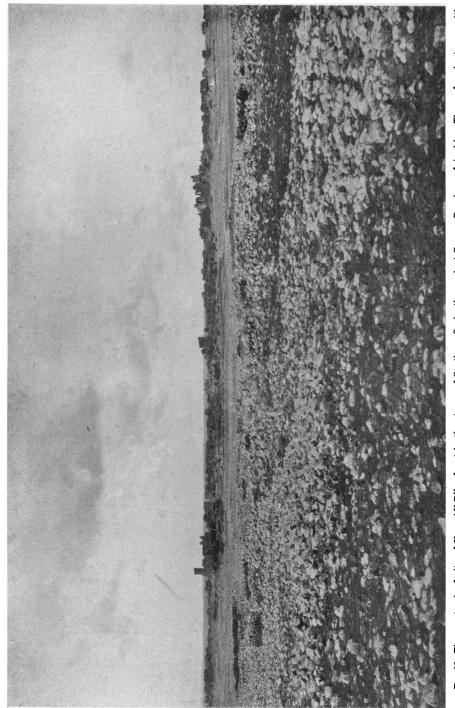


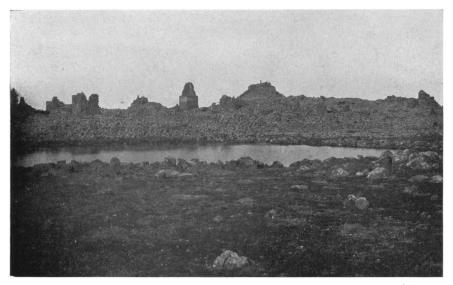
Fig. 15-The great ruined city of Umm idj-Djimal, set in the steppe of Southern Syria, the ancient Roman Province of Arabia. The surface is strewn with volcanic scoriae whitened by lichens, so that the black basalt walls and towers of the city appear to rise out of a snow-white sea.

Fig. 16-Burak, an ancient town rising above a dry stream on the eastern slope of the Djebel Hauran.

its population of Druses and Bedouins, and the antiquities are slowly disappearing under the hammers of modern house builders.

## RUINS OF THE STEPPE REGION

It is not until one penetrates the dry area to the south and southeast of the mountains that one comes into a land corresponding to the deserted parts of Northern Syria. Here the rolling steppe is strewn with the ruins of large towns and villages that have not been touched since the seventh



 ${\bf F}_{\rm IG}$ . 17—is-Safiyeh in the southeastern Djebel Hauran and its ancient pool during one of the rare wet seasons.

century. An ancient city like Umm idj-Djimâl, all in black basalt, stretching level along the desert, is a wonderful sight (Fig. 15). Some of the soil about it has been washed away, leaving the surface thickly strewn with volcanic scoriae which have become covered with fine white lichen, so that the black walls and towers and gaunt arches appear to rise out of a snow-white sea. Many of the towns are spread over the plain; others crown the crests of high ridges directly above the dry beds of ancient streams (Fig. 16). In some cases one finds ancient cisterns that are filled with water in the spring when the snows melt on the mountains to the north (Fig. 17); but the presence of water usually means a settlement, and these are very rare (Fig. 18).

#### THEIR ARCHITECTURE CONTRASTED WITH THAT OF THE NORTH

The ancient architecture, aside from the Nabataean and Roman temples which are objects of rare beauty of design, is less beautiful and less interesting than the architecture of the north, yet it shows great skill in the art of building (Fig. 19). The types of architecture differ considerably

from those of the north. The temples of the pagan period are more numerous and larger and were richly ornamented; there are occasional theaters and large public baths. The churches are much plainer than those of the north but present a far greater variety of plans. There are a few private houses, villas of more than ordinary magnificence, which outshine the more numerous villas of Northern Syria; but the dwellings of the moderately well-to-do are less attractive. Nevertheless they are no less interesting. Some of the private residences in the larger towns

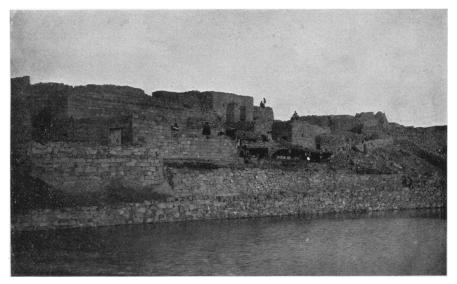


Fig. 18—The village of 'Anz, in the southern Djebel Hauran, still inhabited because of its perennial water supply.

here in the south were four or five stories high, and they contain various features that are not found in the houses of Northern Syria. Monumental tombs are rare and, with a few exceptions, are not to be compared with the magnificent tombs of the north. All these buildings were constructed entirely of stone and are among the most perfect examples of lithic architecture in the world. On the whole, the civilization seems to have been somewhat different from that of the northern region, yet it was certainly equally advanced.

## ANCIENT ROADS AND BRIDGES

Among the most impressive features of the ancient remains in Syria and Arabia are the roads and bridges. These are found from end to end of the entire region. That the roads once existed might have been known from the most ancient road map in existence—a long roll about a foot wide and over twenty-two long—discovered in 1507 and called the Tabula Peutingeriana. This interesting document shows the military roads of the Roman Empire from Britain to India. The seas are practically elim-

inated, and the land is much compressed, so that all the principal roads appear to run in parallel lines east and west; they are shown in red lines, with the stations marked by name from town to town and from one military post to another, the number of miles being written in in Roman The map is believed to date from the fourth century after Christ and to have been drawn from much older sources. Remarkable as is the system of roads, as it appears upon the ancient map, it has been found to be by no means complete so far as Syria is concerned. A number of the principal highways are shown, but many others have been discovered which were equally important but which do not appear. section of the ancient map showing Syria and the desert eastward, together with a key on which the roads are correctly adjusted to the topographical features, is reproduced herewith (Figs. 20a and 20b). The accuracy of the measurements given on this old map has been tested in many ways; but it was interesting, while drawing the map of ancient Syria, to take two points whose positions were well established but which were separated by unexplored territory, like Palmyra and Rusâfā (Pl. I), and to apply the ancient road map, placing the towns between them at intervals of as many miles as indicated; for the total number of miles coincides perfectly, and the exact position of ancient towns still undiscovered is established. Wherever the medieval and modern routes of travel coincide with the ancient roads few traces of the old roadbeds are to be discovered, unless it may be that in some of the deep valleys they are buried beneath earth that has washed down from the mountains.

In many of the desert regions the Roman roads are astonishingly well preserved, as may be seen in the accompanying photograph (Fig. 21) showing a section of the road from Antioch to Chalcis at a point where it crosses the desert mountain below Dânā. The road measures over twenty feet in width; some of the blocks of the pavement measure three feet by four feet, and all approximate three feet in thickness. The apparent fissures which are to be seen in the photograph are not really crevices but a growth of yellow lichen spreading out on either side of the joints, which in reality are perfectly tight in most cases. A few miles to the north of the spot where this photograph was taken the road is spanned by a fine arch. This arch, which is of the simplest design, is not to be thought of as a triumphal arch but more probably as a toll gate; for it stands very near an inscribed stone which marks the boundary between two administrative divisions of Northern Syria. There are several complete Roman bridges in Northern Syria and many medieval, or comparatively modern, bridges that are built on Roman piers. Some of these, like Djisr il-Medjdal just northwest of Hama (Fig. 22), which spans an often dry branch of the Orontes, are composed of four or five arches. A beautiful bridge of three arches crossing a mountain torrent is the one over the Dog River, Nahr il-Kelb. I happened to see this bridge a few weeks after a great flood had

carried away a new bridge for a carriage road and a railroad bridge, both of which were built by French engineers a short distance down the stream, and was glad to pay my respects to the shades of the Roman engineers of the first century.

## NEW LIGHT ON ROMAN ROAD CONSTRUCTION

The roads in Southern Syria, the old Arabian province, are often found in a wonderful state of preservation in the desert steppes; but they are less interesting as subjects for photography. Long sections of

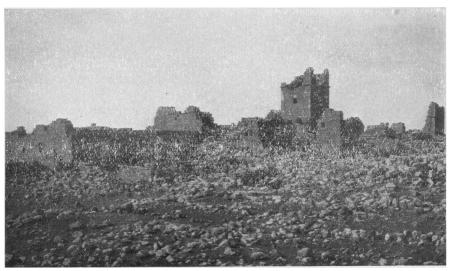
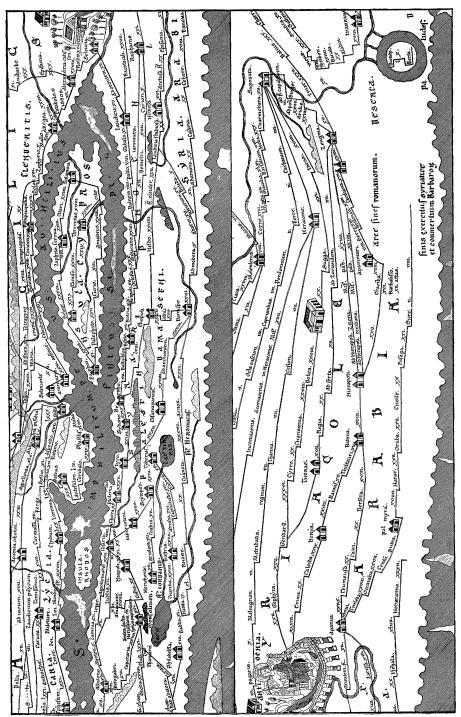
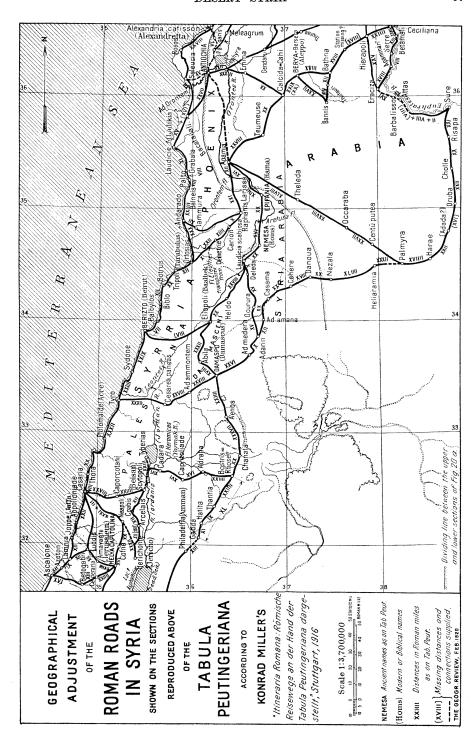


Fig. 19—The monastery of Umm il-Kuttên, south of the Djebel Haurân, typical architecture of the Christian period in Southern Syria.

Trajan's great road, built in A. D. 114 and extending from Bosrā to the Red Sea, are absolutely intact, with milestones standing or lying at every mile; and these intact sections shed entirely new light upon Roman road construction, for they show not only the paving but an elastic top covering above the pavement. As in other Roman roads in this province, the roadbed is about twenty feet wide and is divided into two equal paths by a sort of dorsal ridge composed of a row of stones which rise from five to seven inches above the pavement. The material is entirely black basalt. The pavement is evenly laid in comparatively small blocks of basalt, like irregular polygonal masonry. The roadbed slopes gently from the medial ridge to the outer edges, where it is bound in by a row of stones which protrude from five to seven inches above the pavement. All these features are well known in Roman road making; but here in the desert there are many sections in which an unsuspected feature appears, that is a filling of volcanic cinders four inches deep under a layer of beaten clay which brings the level of the road to the top of the bounding stones, sloping gently from the dorsal ridge. One often observes



Frg. 20a-Facsimile reproduction of the section showing Syria on the Tabula Peutingeriana (Scheyb edition, Vienna, 1733), a medieval map probably based on a Roman map of the fourth century showing the military roads of the Empire. The upper and lower parts are continuous in the original.



pedestrians and drivers of animals forsaking a paved road for the strip of natural soil beside it and has often wondered how the Roman armies and the animals which carried or drew the commerce of ancient times endured the hard pavements; but this discovery of an elastic surface which was perhaps a feature of all, or most, of these roads solves the problem completely.

The bridges of the Arabian province are quite as numerous as those of Northern Syria. They are of slightly different construction owing to the difference of material, for basalt takes the place of limestone. Many



Fig. 21-A section of the Roman road in the desert hills between Antioch and Chalcis, Northern Syria.

of them span the beds of streams that seldom or never have water in them and give clear evidence of the great climatic changes that have taken place (Fig. 23). The remains of these roads and bridges, found in disconnected pieces of pavement, scattered milestones, and ruined piers in the dry stream beds over the length and breadth of the deserted parts of Syria and Arabia, show that there was in ancient times a perfect network of well-built roads, far more in number than those shown on the ancient map. The main arteries were perhaps primarily for the mobilization of troops; those leading toward the limits of the empire were undoubtedly for defense; but a very large number of these roads were for convenience and were directly connected with facilities for transportation, communication, and trade between the communities.

## Ancient Inhabitants of the Region

#### HIGH STATE OF CIVILIZATION

But who were the inhabitants of these hundreds of deserted towns? Who were the men and women that traveled over these roads, maintained the temples, sat in the theaters, attended the churches, patronized the

baths, lived in these fine houses, and were buried in these splendid tombs? The brief description given above of the tangible remains which it has left behind is sufficient proof that the civilization of Syria and Arabia had reached a very high state indeed; and more could be written to show that it had not passed its zenith, had not known the beginnings of decline, but was still in the ascendant when it was cut off by untoward external forces. The people of this country had an art of their own, influenced for a time by Greek teaching and direction but eventually returning to its original forms of expression, enriched by foreign elements, and develop-



Fig. 22—Roman bridge, Djisr il-Medjdal, northwest of Hama, Northern Syria.

ing into a style in advance of the art of other parts of the world at the time. They likewise had languages of their own, Syriac in the north and Arabic in the south, which yielded for a while to Greek in certain important fields but which had begun to revive under a new stimulus of national or racial feeling. It is plain from a comprehensive study of their architecture and other arts, found in their ruined towns and represented in objects from their tombs, that the ancient population of these regions was composed in large part of an intelligent, well-to-do middle class. If the domestic architecture of a people may be taken as an index to their culture—and I believe it may be, in spite of the danger of an invidious modern application—the culture of the Syrians was exceptionally high. If many of their inscriptions leave much to be desired in matters of spelling and grammatical construction, one must recall the fact that the writers were using a foreign language, which modern scholars know more about than did even the Greeks themselves.

#### ECONOMIC CONDITIONS

That they were well-to-do is evident from inscriptions which prove that they had enough and to spare of this world's goods. In more than one place a citizen presents a public bath to his city, in others a church or a monastery is erected at private expense. Less wealthy citizens gave doorways or other features to the village churches. The inscriptions show that buildings were often erected at public expense.

Their society was peaceful and well ordered, for many of the most sumptuous villas stand in groups with no surrounding town walls to protect them, and only a few of the smaller and more ancient places had town walls formed by joining up the rear walls of houses. It is only out toward the Euphrates in the north, and on the farthest eastern confines in the south, that one finds walled towns, fortresses, and barracks, as precautions against the Parthians or Persians on the one hand or the desert tribes on the other.

The inhabitants could not have been large landowners—the towns are placed too closely together for this; and for the same reason they could not have been possessed of large herds of cattle or flocks of sheep. But the remains tell us that they raised olives and grapes and made oil and wine on a large scale, especially in the north; for there are enclosures, with rows upon rows of plain upright posts of stone, which were unquestionably vineyards; and there are hundreds of rock-hewn oil and wine presses, to say nothing of buildings erected to house large presses, and inscriptions which designate one house as a wine press and another as an oil factory. These commodities were produced in quantities more than sufficient for local consumption, one would suppose, and were probably exported to Antioch and other large cities and perhaps overseas.

Many towns are composed almost entirely of shops or bazaars. undoubtedly flourished between these Syrian towns and the towns on the coast, as well as with countries lying to the east. In the south the caravan trade with Arabia, Egypt, and Persia must have developed a large body of merchants. In one of the inscriptions a man records the fact that he has taken a caravan out to the Indus; in another a citizen boasts that he had been on an embassy to Rome. As merchants and traders, then, and as producers of oil and wine we may think of the early dwellers in these long-deserted cities and towns; as being in touch with East and West, with North and South, by commerce carried on over excellent roads, living in peace among orderly surroundings; not oppressed by taxation to a point where they were unable to surround themselves with a considerable amount of luxury, and enjoying many comforts and conveniences which were denied to, or unsought by, the middle classes of continental Europe until very recent times (I refer to baths and water closets) and are still beyond the reach of the less progressive countries.

## ABRUPT END OF THIS CIVILIZATION

It may be asked, "What brought this great civilization, so modern in many of its aspects, to so sudden and complete an end?" The question

cannot be answered offhand. One knows from history of two disastrous wars of invasion, that of the Persians from the east and that of the Arabs, or Saracens, from the south in the first third of the seventh century. One is told that it was the custom of the Persians to lay waste a wide strip of territory between themselves and those whom they had defeated if they failed to occupy that territory. The conquerors may have cut down the olive groves and the vines; they may even have wrecked the presses and the terrace walls. There are many signs of looked-for



FIG. 23—Roman bridge over the dry Wâdi Zêdi, north of the ancient town of Bostra, Southern Syria. The fact that many of the Roman bridges span the beds of streams that seldom or never have water in them now gives clear evidence of the great climatic changes that have taken place.

trouble from the east in the strengthening of old fortifications and the building of new ones out toward the Euphrates during the last quarter of the sixth century. But, allowing for two bloody wars in close succession, allowing for much destruction on the part of the victors, and for deportations and a general exodus of the population, no human hands were ever able to transform a fertile, populous, and thriving country into a desert in so short a time. We must look for great natural changes as well, changes induced perhaps and hastened by the activities of man.

## DESICCATION AS A CAUSE

We may draw certain very definite conclusions as to the former conditions of the country itself. There was soil upon the northern hills where none now exists, for the buildings now show unfinished foundation courses which were not intended to be seen; the soil in depressions without outlets is deeper than it formerly was; there are hundreds of olive and wine presses in localities where no tree or vine could now find footing; and

there are hillsides with ruined terrace walls rising one above the other with no sign of earth near them. There was also a large natural water supply. In the north as well as in the south we find the dry beds of rivers, streams, and brooks with sand and pebbles and well-worn rocks

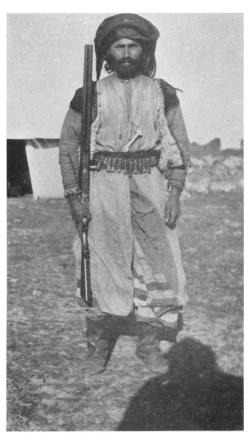


Fig. 24—A type of the Hauwarni, settled Moslem Arabs living in the plain of in-Nukra south of Damascus.

but no water in them from one year's end to the next. We find bridges (Fig. 23) over these dry streams and crudely made washing boards along their banks directly below deserted towns. There are well heads and well houses, spring houses, and inscriptions referring to springs; but neither wells nor springs exist today except in the rarest instances. Many of the houses had their rock-hewn cisterns. never large enough to have supplied water for more than a brief period, and corresponding to the cisterns which most of our recent forefathers had which were for convenience rather than for dependence. Some of the towns in Southern Syria and one or two in Northern Syria were provided with large public reservoirs; but these are not large enough to have supplied water to their original populations. The high plateaus were of course without irrigation; but there are no

signs, even in the lower flatter country, that irrigation was ever practiced; and canals for this purpose could not have completely disappeared. There were forests in the immediate vicinity, forests producing timbers of great length and thickness; for in the north and northeast practically all the buildings had wooden roofs, wooden intermediate floors, and other features of wood. Costly buildings, such as temples and churches, employed large wooden beams; but wood was used in much larger quantities in private dwellings, shops, stables, and barns. If wood had not been plentiful and cheap—which means grown near by—the builders would have adopted the building methods of their neighbors in the south, who used very little wood and developed the most perfect type of lithic architecture the world has

ever seen. And here there exists a strange anomaly: Northern Syria, where so much wood was employed in antiquity, is absolutely treeless now; while in the mountains of Southern Syria, where wood must have been scarce in antiquity to have forced upon the inhabitants an almost exclusive use of stone, there are still groves of scrub oak and pine, and travelers of half a

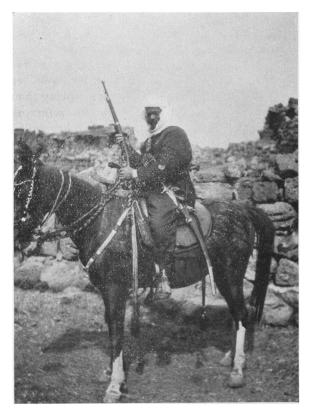


Fig. 25-A Druse sheikh of the Ledia.

century ago reported large forests of chestnut trees. Whatever plausibility may attach to the theory that the loss of forests means a reduction of rainfall, it is perfectly apparent that large parts of Syria once had soil and forests and springs and rivers, while it has none of these now, and that it had a much larger and better distributed rainfall in ancient times than it has now. It would appear that the inhabitants used up a large part of their forests for building purposes and for charcoal; if they allowed sheep and goats to pasture where the forests had been, the hills could not reforest themselves. The olive groves and the terraces would do much to hold the soil on the hillside; but when these were destroyed there was nothing to prevent the utter denudation of the mountains.

## HUNTINGTON'S CLIMATIC PULSATIONS

Dr. Ellsworth Huntington in his most interesting book, "Palestine and Its Transformation," depending in part at least upon the observations of the American Archaeological Expedition to Syria of 1899-1900 and the Princeton Archaeological Expeditions of 1904-05 and 1909, has evolved a theory of pulsations of climatic conditions from wet to dry and from dry to wet through many generations, each dry period leaving the country poorer than the last one. In so far as this theory was based upon observations of mine which pointed to a complete lack of inscriptions and to a cessation of building activity between the years 252 and 324



Fig. 26—The Shêkh id-Dîn, or religious head, of the Druses of the Djebel Haurân, and his body guard.

A. D., I am now obliged to limit it; for the reason that later observations in all parts of deserted Syria have brought to light fourteen inscriptions evenly distributed over those seventy-two years—a number just equal to that of the building inscriptions bearing dates during the seventy-five preceding years. Moreover, Dr. Huntington's statement that there was a revival of building activity in Syria by the Arabs after the year 610, so far as it depends upon statements given out by me, is a little misleading. The evidence of Arab building activity is very scant. We have perhaps four examples of edifices erected under the Ommayads in the eighth century, all with a very limited area. There were numerous Arab castles erected throughout the length and breadth of Syria in the eleventh and twelfth centuries, and there are also a few places in which medieval Arab tombstones are found. But Arab civilization was confined to a very small

<sup>1</sup> Chapter 13 and especially pp. 334-336 of Chapter 14.

number of places compared with the number of towns where there are no signs of Arab occupation. A vast majority of the cities and towns of Christian Syria appear to have been deserted early in the seventh century and to have remained uninhabited and in ruins ever since.

## Present Inhabitants

#### THE NORTHERN REGION

But who are the present inhabitants of these waste places of Syria? For I have said that there are a few natives with sufficient hardihood to



Fig. 27-Druse types, armed and unarmed.

face the dangers of starvation in some of these otherwise uninhabited regions. The northernmost hills of limestone are all but deserted. At certain seasons small groups of Turkoman tents are to be seen in a few of the ruined towns, and settlements of two or three families of Kurds are sequestered in a few others; but most of the ruins are entirely deserted. In the limestone hills to the east of the Orontes there are small and extremely poor villages, often within the ruined towns. Their inhabitants are Arabic-speaking peasants of the most wretched class, but a few of them are Druses. These settlers do not live in the ancient buildings but build their hovels among them, using old material. To the east lies a plain through which the highway runs. Here there are soil and vegetation and hence cultivation of varying width; for the desert begins only a little to the east of the road, and there are small towns and villages of fair size where the inhabitants are willing to stake their lives on the chance of an occasional moist season with good crops. But the great

tract stretching beyond this far out toward the Euphrates is entirely a desert, and few even of the nomadic Arabs visit it. As one travels southward along the narrow cultivated strip bordering the desert and at the foot of the mountains, one begins to encounter a more mixed population as soon as one passes the region of Hama. Here are not only villages of the usual Moslem fellahîn, or peasantry, but also an ever increasing number of Circassian villages, usually better built and cleaner than the others, and a few large villages of Christians of the old Jacobite sect—sequestered



Fig. 28-Druses of the younger generation.

spots in which the ancient Syriac tongue is still spoken and in which the schismatic sect founded by Jacobus Baradaeus in the fifth century still uses its Early Christian liturgy.

#### THE SOUTHERN REGION

South of Damascus the rich plain of in-Nukra is peopled by settled Moslem Arabs called Hauwarni (Fig. 24) and a few Christians, a poor and oppressed peasantry living in wretched villages in the midst of teeming fields of grain. Each village marks the site of an ancient town, and fragments of fine architectural monuments are to be seen in every one of them. The villages in the foothills to the west are occupied chiefly by Circassians imported by the Sultan Abdul Hamid, armed by him, and put in possession of the best water sources as a sort of buffer against the Arabs.

### THE DRUSES

To the east, the mountains of the Haurân are entirely populated by the Druses; the mountains are often called the Djebel id-Drûz. This most

interesting sect, which might almost be called a little nation, are comparatively new comers. They speak only Arabic; but in color, features, build, and manners they are unlike their neighbors. In their mountain fastnesses they have maintained virtual independence of the Turks, are monogamous, and have a secret religion. They are ruled in patriarchal fashion by a number of chiefs (Fig. 25) whose power is very great. Their mountain is not so bare of soil as the northern mountains are, though there is less soil here now than in ancient times, and their life is not a particu-



Fig. 29-Christian Bedouins of the steppe, Southern Syria.

larly hard one. They own large flocks and herds which are cared for by dependent tribes of Bedouins, who take them to the Djôf in winter; their houses are large and quite comfortable, and the great sheikhs live a life that makes one think of Job in his days of prosperity. It seems strange, after traveling among the dark-skinned Bedouins and the swarthy fellahîn, to come upon these strangers, among whom one sees so many faces that would not look out of place in northern Europe or even in a New England village. Their Shêkh id-Dîn, or religious head, is a man with fair complexion and reddish hair (Fig. 26), fine courtly manners, and no little learning. Their dress is in part peculiar to themselves and partly copied from the Bedouins (Figs. 27 and 28).

#### CHRISTIAN BEDOUINS

The lava fields of the Ledjā to the north of the Djebel Haurân are partly inhabited; in some localities by Druses living in well-built villages, in others by Bedouins who have pitched their tents among the ancient ruins. The great rolling steppe to the south, which was once a very

productive area, has a few Druse villages at the foot of the mountain; but beyond these it has no settled population and affords only scant pasture for the great tribes in their migrations. Here it was astonishing to encounter a small group of Christian Bedouins (Fig. 29) who said they were representatives of a small tribe. They appear to have a primitive form of Christianity and are monogamous. They regret that they have "lost the priesthood," as they say, and that their "graves are unblessed"; but they seek out a Christian village, from time to time, or find some wandering Greek priest and have their marriages, which are made legal by the sheikh, blessed and their numerous children baptized, often five or six at one time.

## Contrast of Present and Past

One cannot fail to contrast these present conditions of life and of civilization with those of the glorious past. In the wholly deserted towns, where the silence of death reigns and the gaunt wrecks of once mighty edifices stand as tombstones above a people's grave, the contrast is strong enough; but, wherever there are signs of life still struggling against the tremendous odds which nature imposes, the contrast is stronger still. Only misery, want, and ignorance exist today in the place of former opulence, comfort, and culture. The villages of the Druses are the only exception to these conditions; for the Druses hold their heads high, greet the stranger as a distinguished guest, and entertain him like lords. houses, though crude, are often comfortable, their carpets and cushions rich, and their clothes often magnificent. But everywhere else where there are people living among the ruins-men, women, and little children -one finds a cowed, frightened, suspicious, and superstitious race reduced to most abject poverty, living in hovels composed in part of fragments of exquisitely chiseled stonework with inscriptions setting forth the wealth and culture of the original inhabitants; and this shocking change has taken place in thirteen centuries, partly no doubt through natural causes, but in large measure through evil government.



